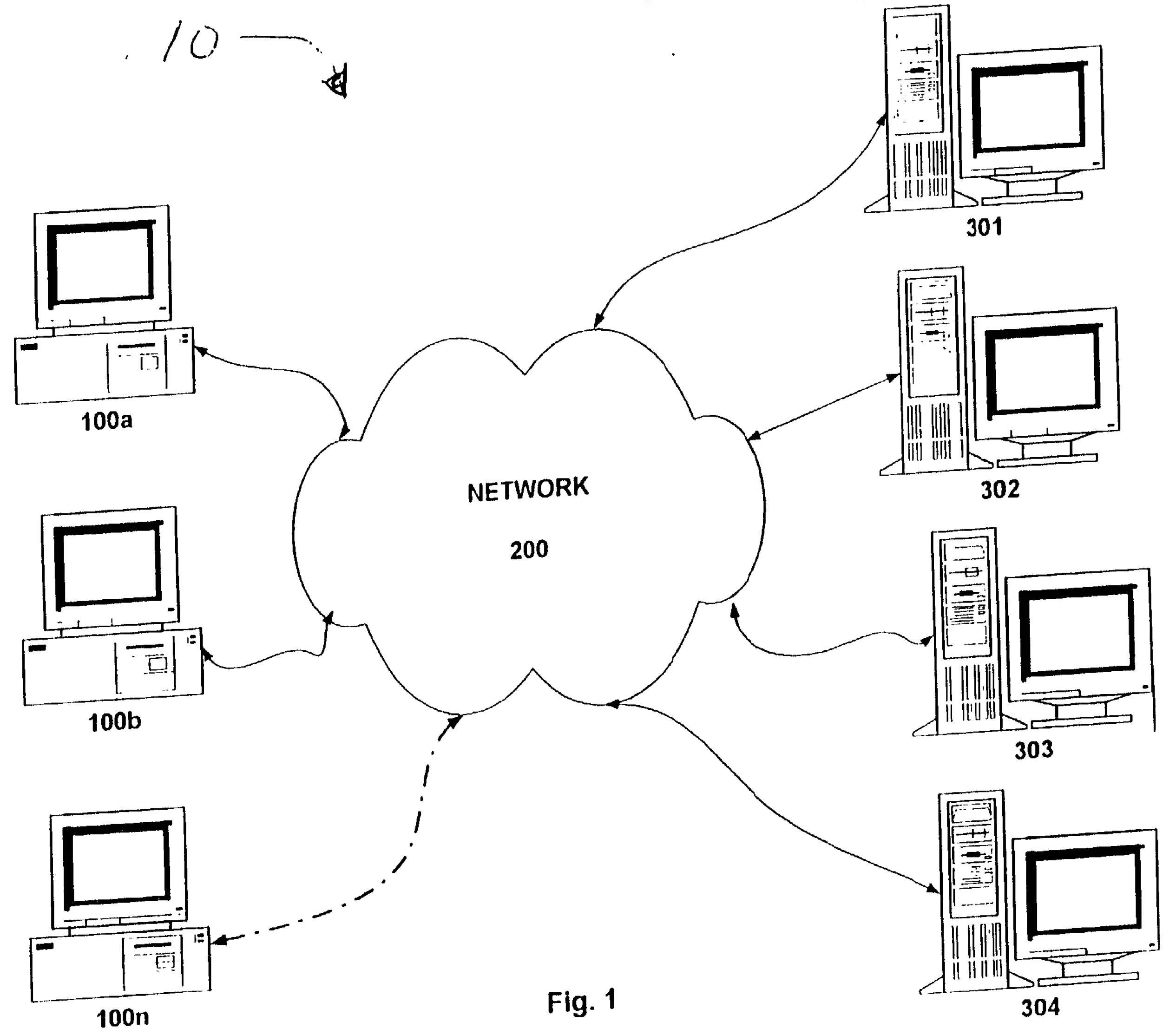


Fig. 1

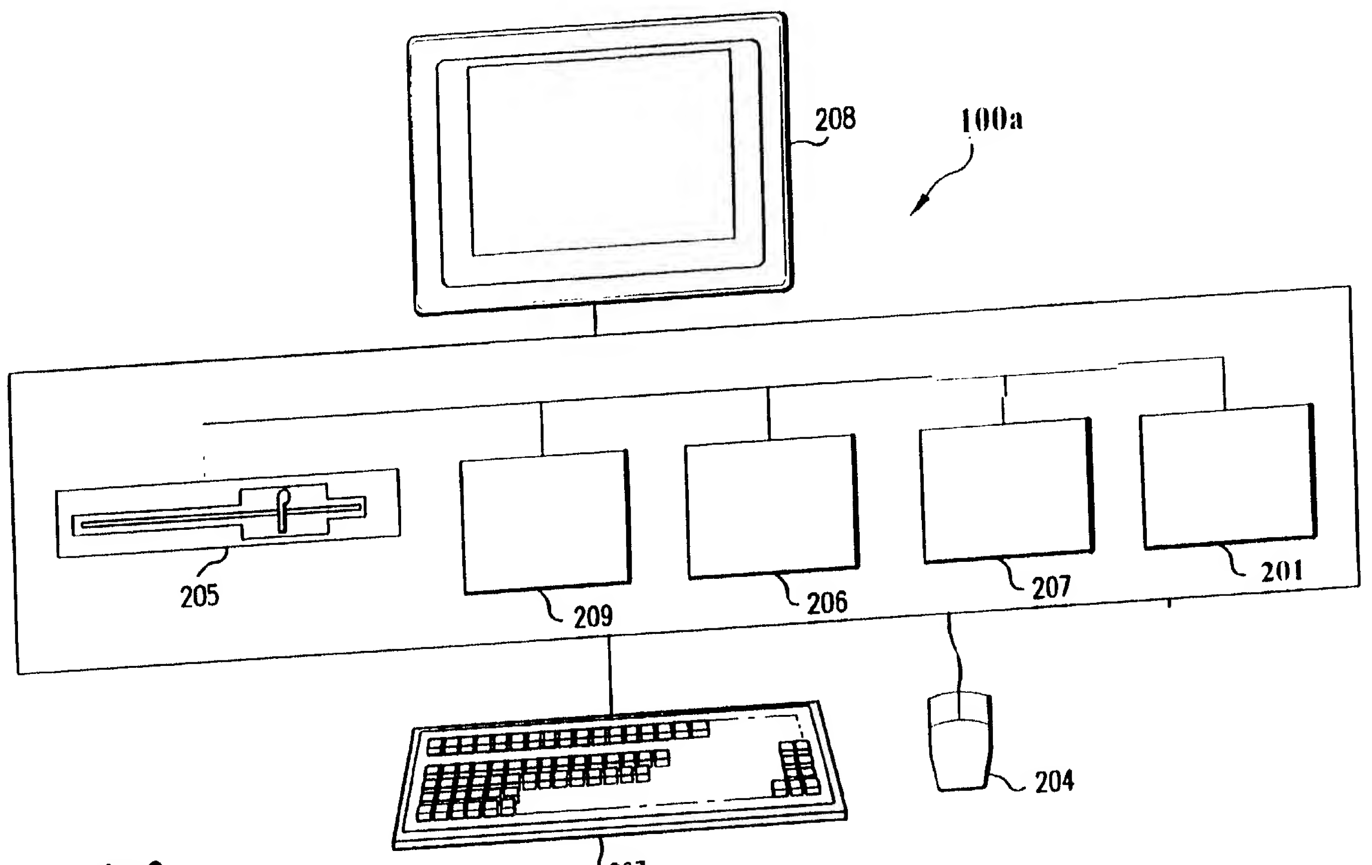
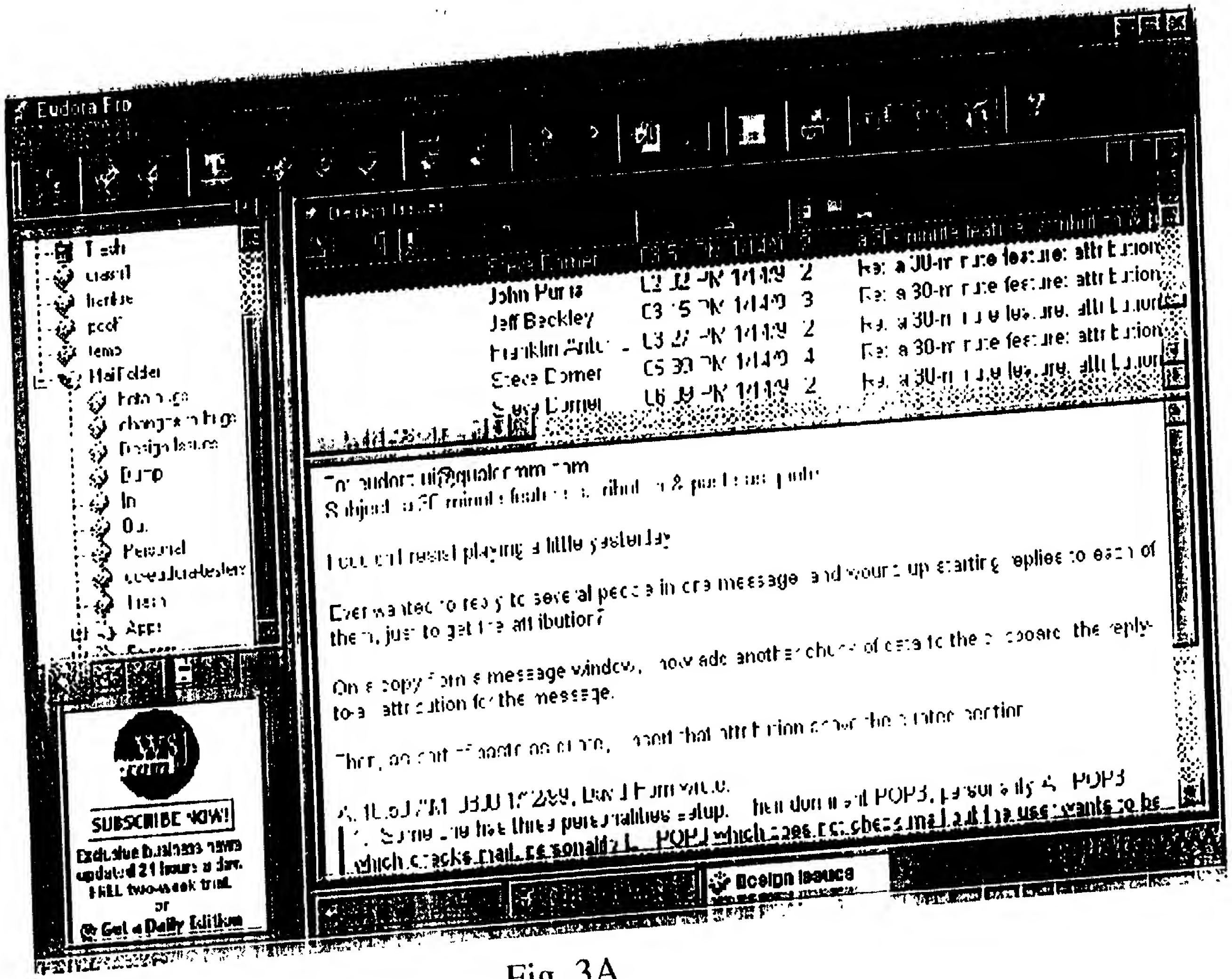


Fig. 2



```
John Purtis      02:32 PM 1/14/99  2   Re: a 30-minute feature: attribution
Jeff Beckley     03:15 PM 1/14/99  3   Re: a 30-minute feature: attribution
Franklin Antle   03:27 PM 1/14/99  2   Re: a 30-minute feature: attribution
Steve Dorner     05:30 PM 1/14/99  4   Re: a 30-minute feature: attribution
Steve Dorner     06:39 PM 1/14/99  2   Re: a 30-minute feature: attribution
```

To: eudora-ui@qualcomm.com
Subject: a 30 minute feature: attribution & partial quote

I could not resist playing a little yesterday

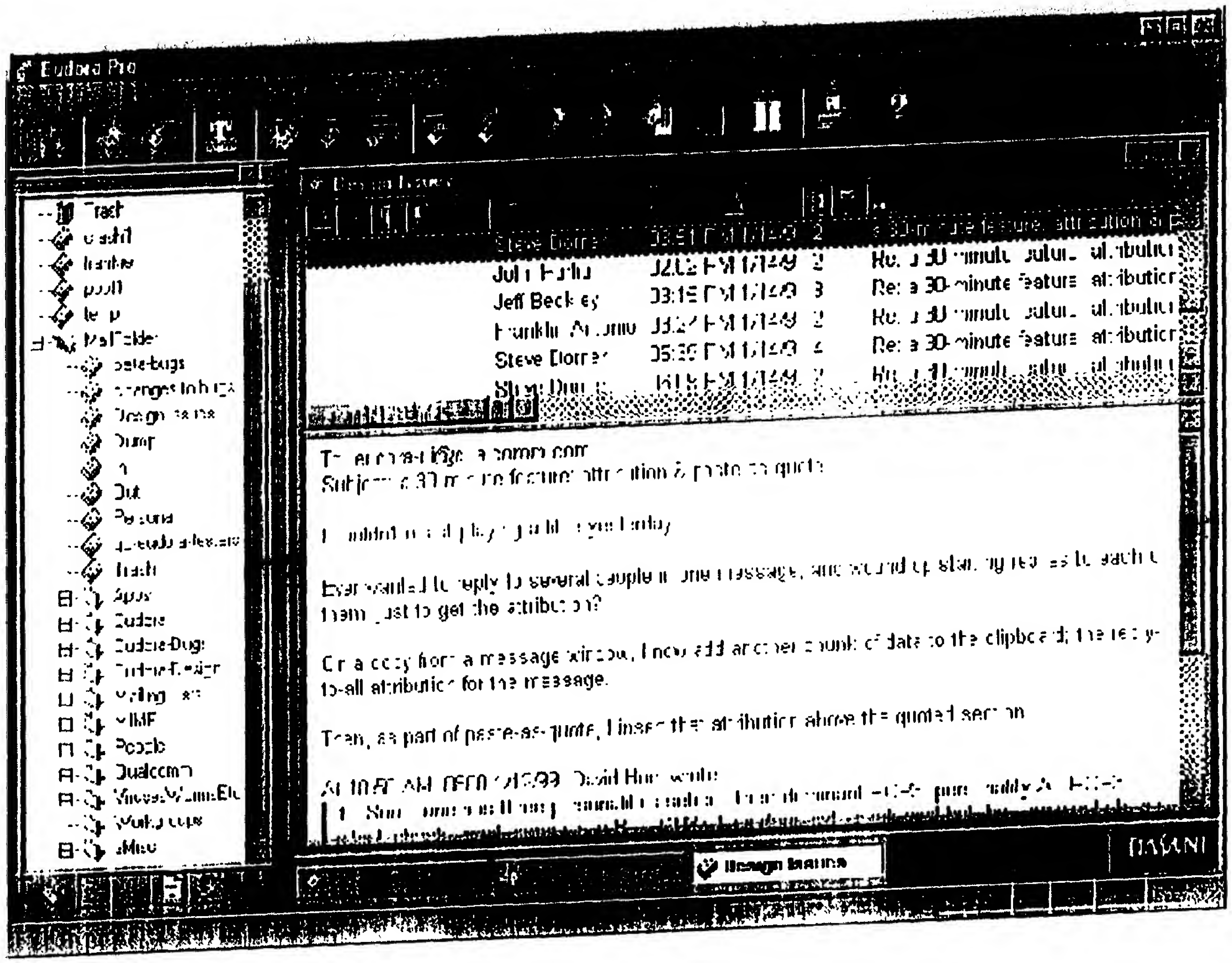
Ever wanted to reply to several people in one message, and wound up starting replies to each of them, just to get the attribution?

On a copy from a message window, now add another chunk of data to the clipboard: the reply-to attribution for the message.

Then, on paste as quote, insert that attribution above the quoted portion

At 10:53 PM 1/12/99, David Forn wrote:
> Someone has three personalities setup. Then don't want POP3 personality A, POP3 which checks mail, personality B, POP3 which does not check mail but the user wants to be

Fig. 3A



Steve Dorner	03:51 PM 1/14/99	2	a 30-minute feature: attribution &
John Fariha	02:02 PM 1/14/99	2	Re: a 30-minute feature: attribution
Jeff Beckley	03:15 PM 1/14/99	3	Re: a 30-minute feature: attribution
Franklin Antonio	03:24 PM 1/14/99	2	Re: a 30-minute feature: attribution
Steve Dorner	05:30 PM 1/14/99	4	Re: a 30-minute feature: attribution
Steve Dorner	[illegible] PM 1/14/99	2	Re: a 30-minute feature: attribution

To: [illegible]@[illegible].com
Subject: a 30 minute feature: attribution & paste as quote

I couldn't [illegible] play [illegible] today

Ever wanted to reply to several people in one message, and wound up starting replies to each of them just to get the attribution?

On a copy from a message window, I now add another chunk of data to the clipboard; the reply-to-all attribution for the message.

Then, as part of paste-as-quote, I insert the attribution above the quoted section.

At 10:57 AM 1/14/99, David [illegible] wrote:

[illegible]

Fig. 3B

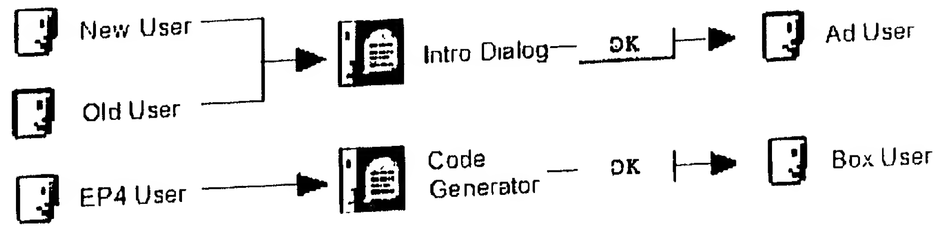


Fig. 4A

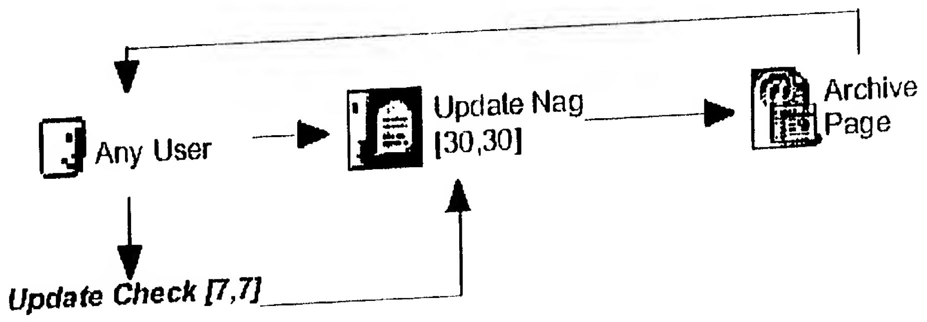


Fig. 7A

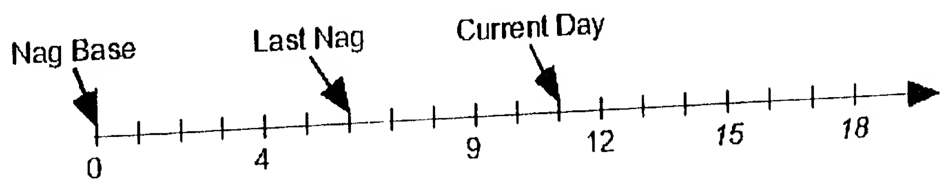
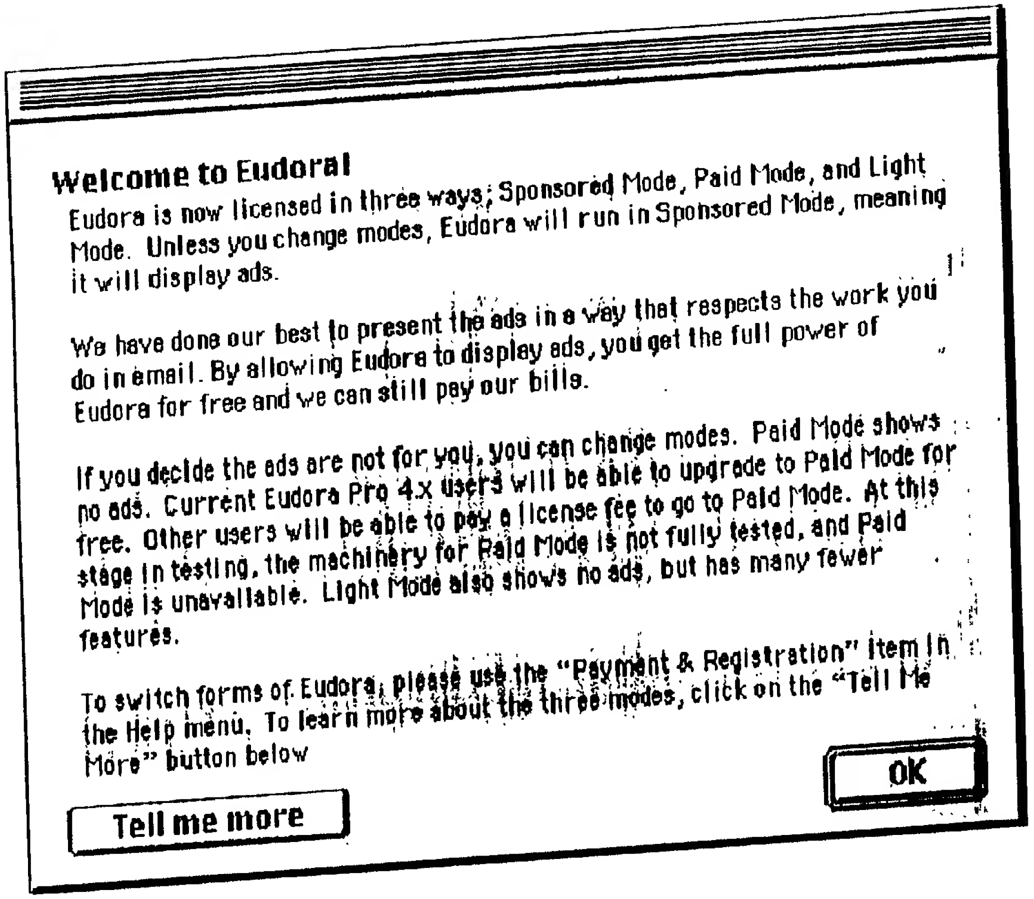


Fig. 11



Welcome to Eudora!

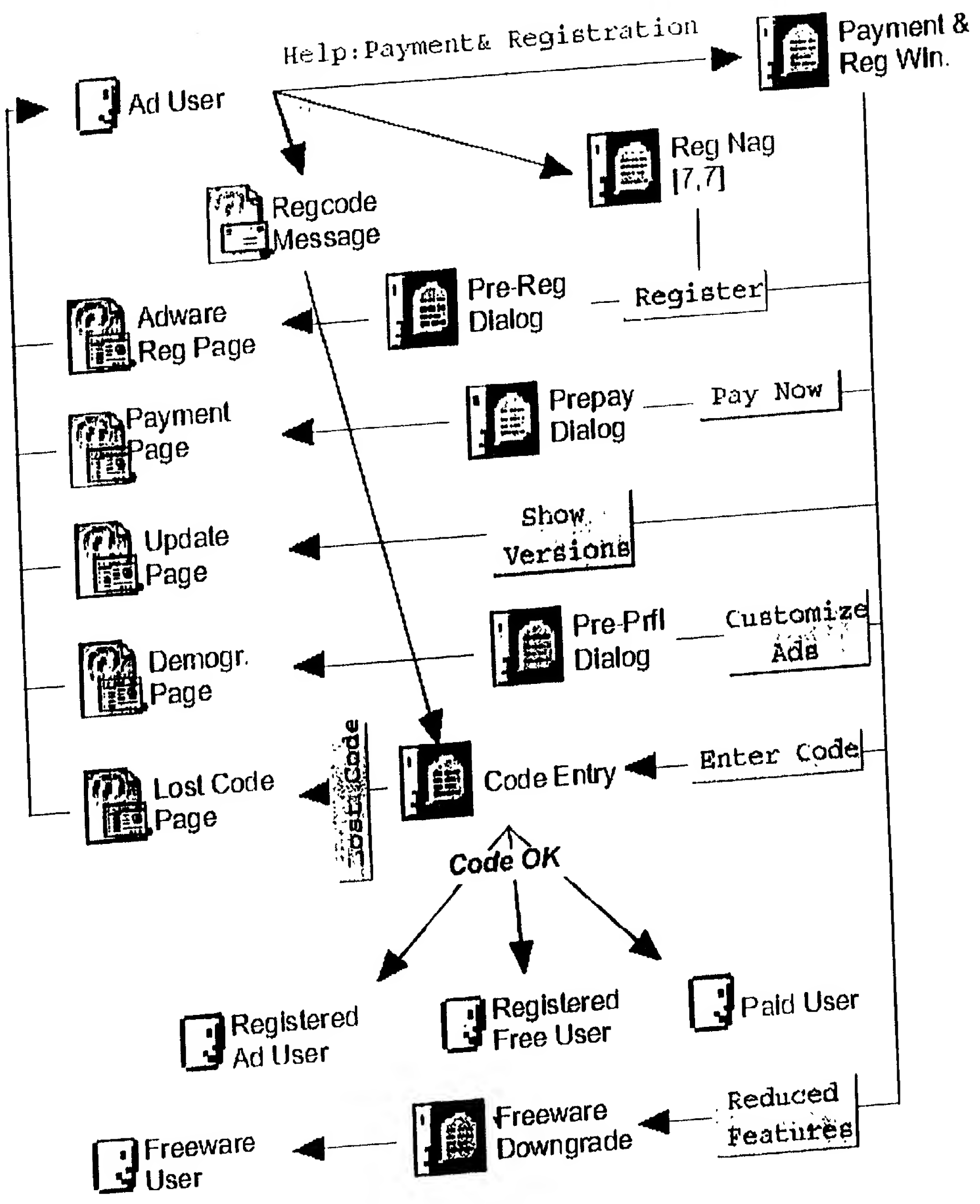
Eudora is now licensed in three ways; Sponsored Mode, Paid Mode, and Light Mode. Unless you change modes, Eudora will run in Sponsored Mode, meaning it will display ads.

We have done our best to present the ads in a way that respects the work you do in email. By allowing Eudora to display ads, you get the full power of Eudora for free and we can still pay our bills.

If you decide the ads are not for you, you can change modes. Paid Mode shows no ads. Current Eudora Pro 4.x users will be able to upgrade to Paid Mode for free. Other users will be able to pay a license fee to go to Paid Mode. At this stage in testing, the machinery for Paid Mode is not fully tested, and Paid Mode is unavailable. Light Mode also shows no ads, but has many fewer features.

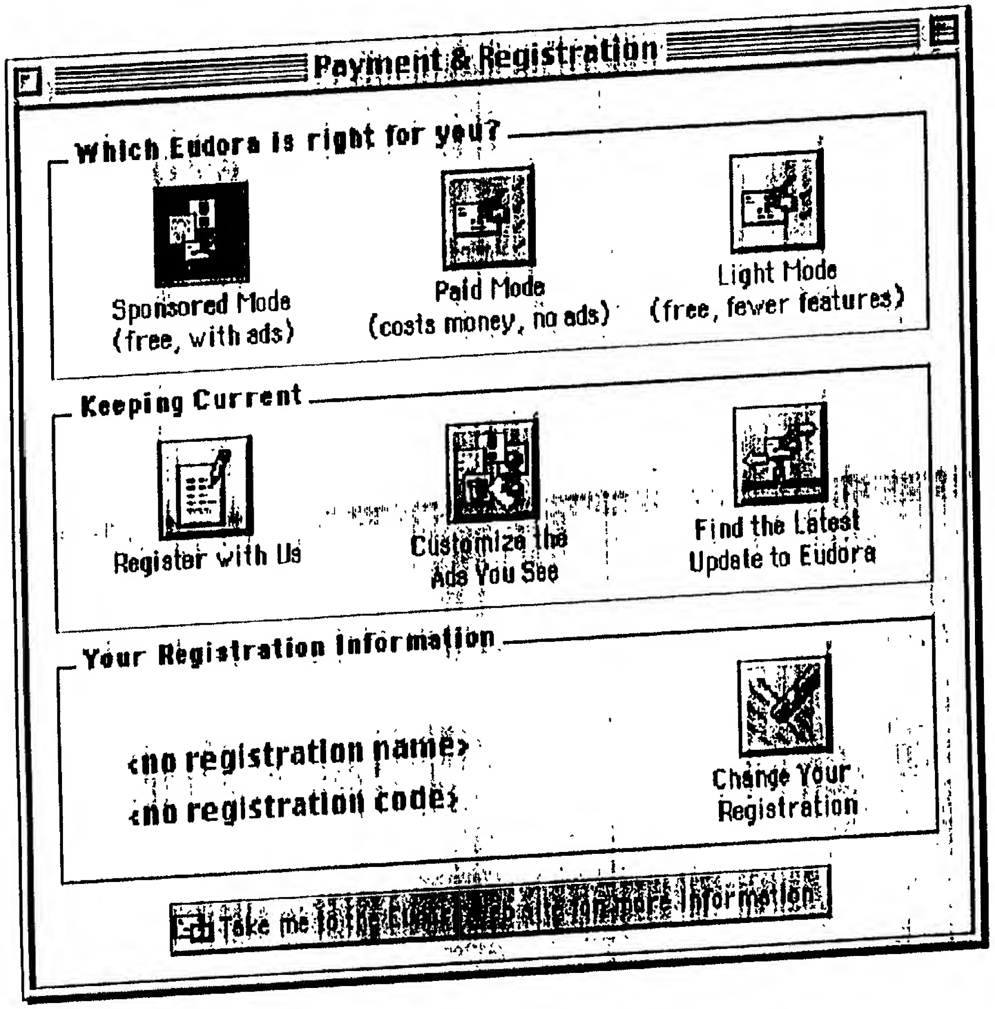
To switch forms of Eudora, please use the "Payment & Registration" item in the Help menu. To learn more about the three modes, click on the "Tell Me More" button below

Fig. 4B



Help: Payment& Registration
Payment & Reg Win.
Ad User
Reg Nag [7,7]
Regcode Message
Register
Pre-Reg Dialog
Adware Reg Page
Pay Now
Prepay Dialog
Payment Page
Show Versions
Update Page
Customize Ads
Pre-Prfl Dialog
Demogr. Page
Enter Code
Code Entry
Lost Code
Lost Code Page
Code OK
Registered Ad User
Registered Free User
Paid User
Reduced Features
Freeware Downgrade
Freeware User

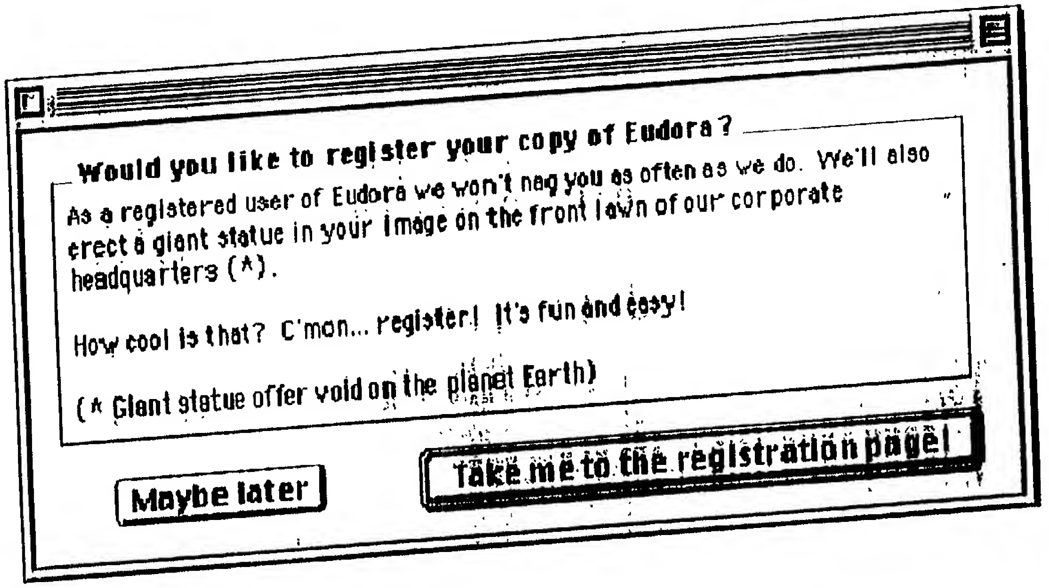
Fig. 5A


Payment & Registration
Which Eudora is right for you?
Sponsored Mode
(free, with ads)
Paid Mode
(costs money, no ads)
Light Mode
(free, fewer features)
Keeping Current
Register with Us
Customize the Ads You See
Find the Latest Update to Eudora
Your Registration Information

<no registration name>
<no registration code>

Change Your Registration
Take me to the Eudora Web site for more information

Fig. 5B



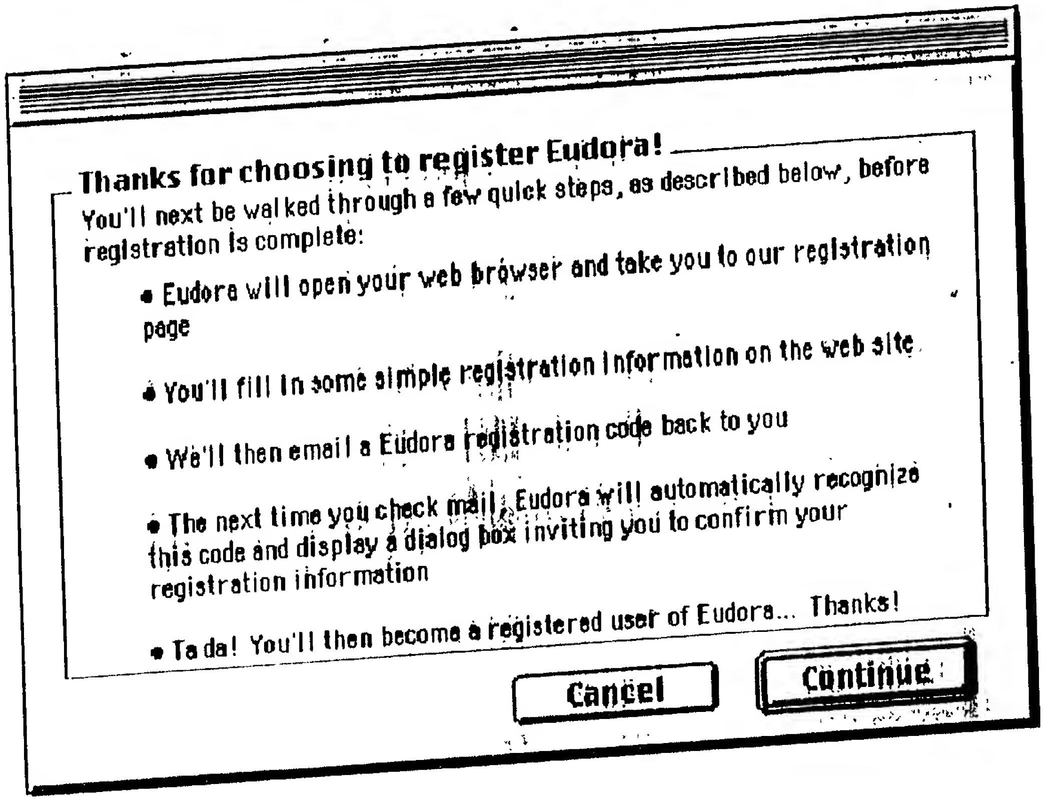
Would you like to register your copy of Eudora?

As a registered user of Eudora we won't nag you as often as we do. We'll also erect a giant statue in your image on the front lawn of our corporate headquarters (*).

How cool is that? C'mon... register! It's fun and easy!

(* Giant statue offer void on the planet Earth)

Fig. 5C

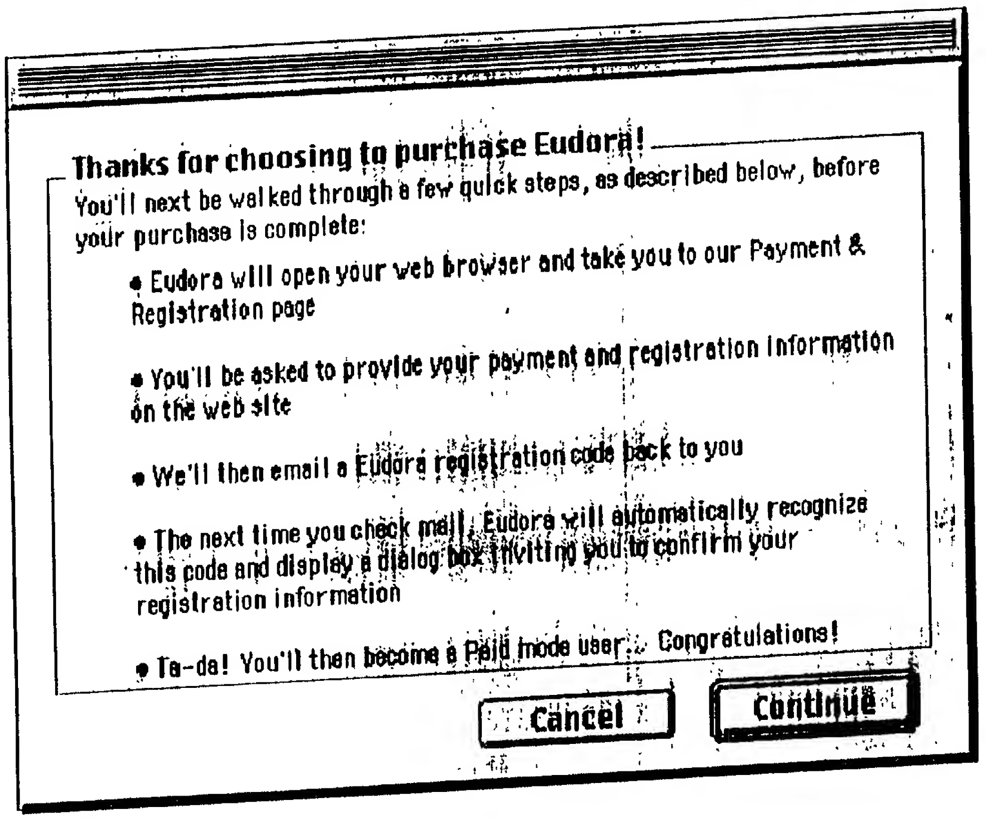


Thanks for choosing to register Eudora!

You'll next be walked through a few quick steps, as described below, before registration is complete:

- Eudora will open your web browser and take you to our registration page
- You'll fill in some simple registration information on the web site
- We'll then email a Eudora registration code back to you
- The next time you check mail, Eudora will automatically recognize this code and display a dialog box inviting you to confirm your registration information
- Ta da! You'll then become a registered user of Eudora... Thanks!

Fig. 5D

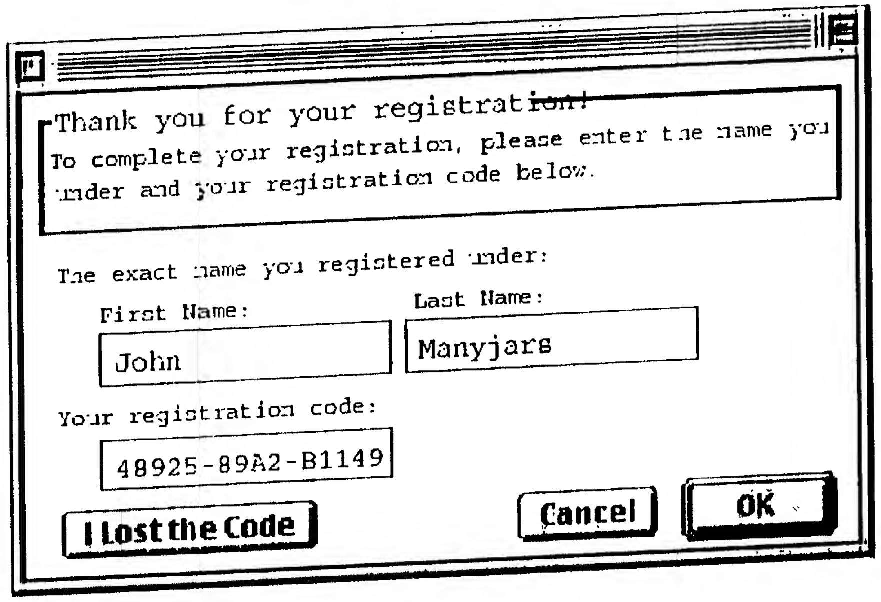


Thanks for choosing to purchase Eudora!

You'll next be walked through a few quick steps, as described below, before your purchase is complete:

- Eudora will open your web browser and take you to our Payment & Registration page
- You'll be asked to provide your payment and registration information on the web site
- We'll then email a Eudora registration code back to you
- The next time you check mail, Eudora will automatically recognize this code and display a dialog box inviting you to confirm your registration information
- Ta-da! You'll then become a Paid mode user... Congratulations!

Fig. 5E


Thank you for your registration!
To complete your registration, please enter the name you under and your registration code below.

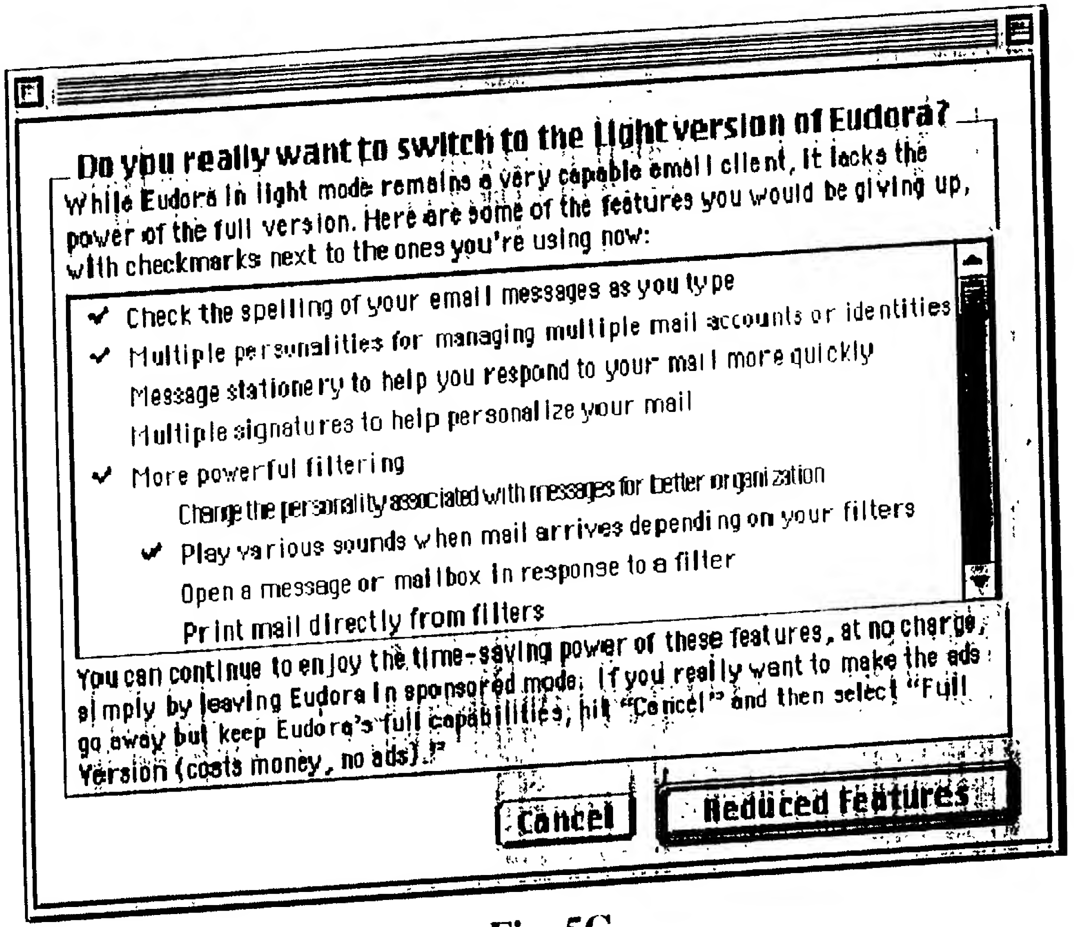
The exact name you registered under:

First Name:	Last Name:
John	Manyjars

Your registration code:

48925-89A2-B1149

Fig. 5F



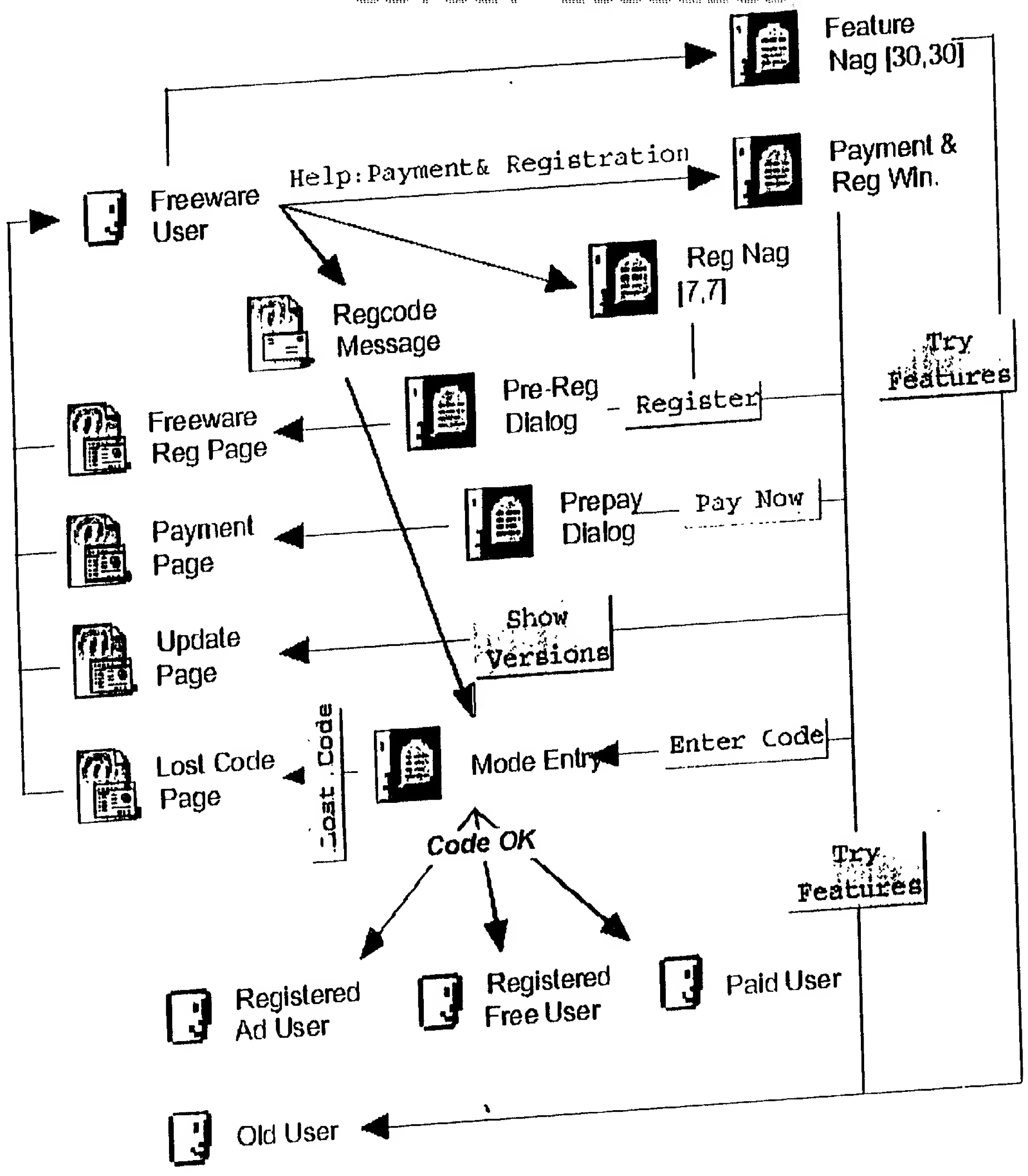
Do you really want to switch to the light version of Eudora?

While Eudora in light mode remains a very capable email client, it lacks the power of the full version. Here are some of the features you would be giving up, with checkmarks next to the ones you're using now:

- ✓ Check the spelling of your email messages as you type
- ✓ Multiple personalities for managing multiple mail accounts or identities
- Message stationery to help you respond to your mail more quickly
- Multiple signatures to help personalize your mail
- ✓ More powerful filtering
  - Change the personality associated with messages for better organization
  - ✓ Play various sounds when mail arrives depending on your filters
  - Open a message or mailbox in response to a filter
  - Print mail directly from filters

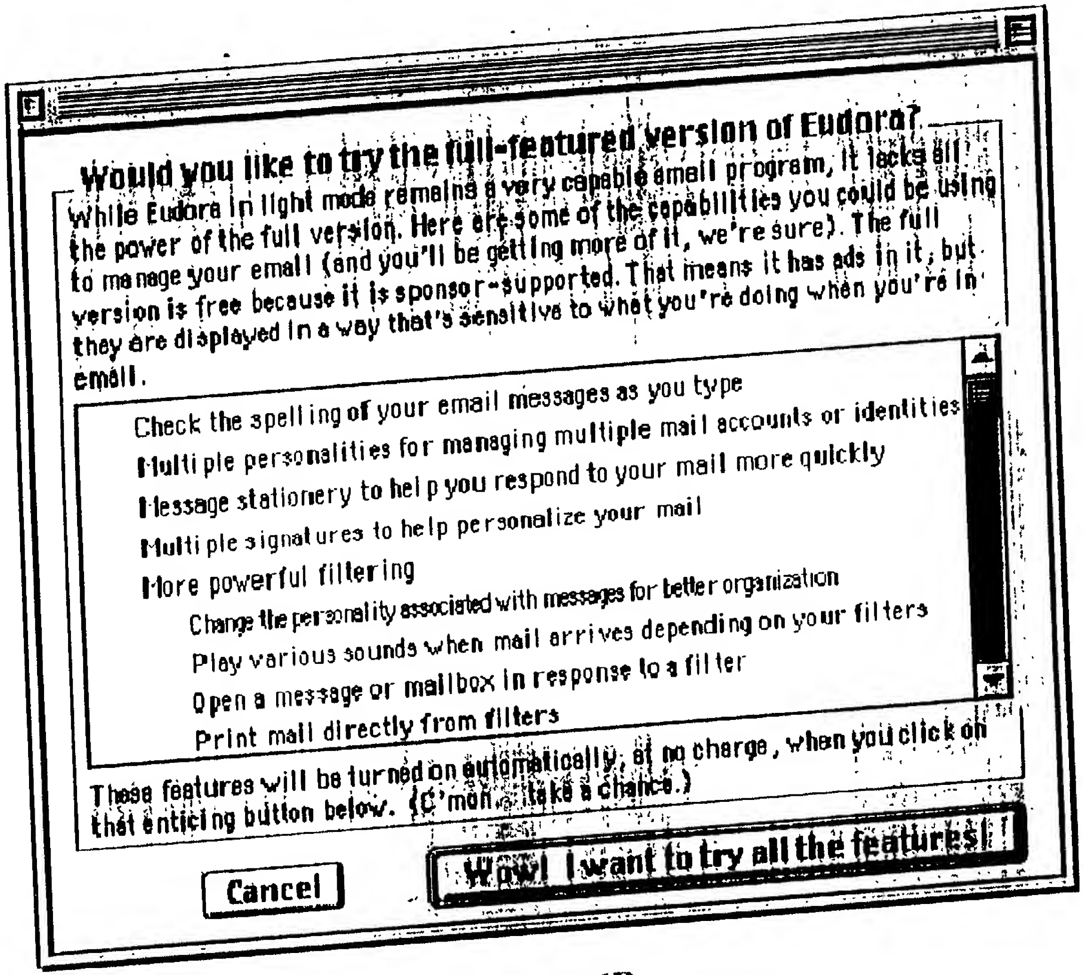
You can continue to enjoy the time-saving power of these features, at no charge, simply by leaving Eudora in sponsored mode. If you really want to make the ads go away but keep Eudora's full capabilities, hit "Cancel" and then select "Full Version (costs money, no ads)."

Fig. 5G



Feature Nag [30,30]
Help: Payment & Registration
Payment & Reg Win.
Freeware User
Reg Nag [7,7]
Regcode Message
Pre-Reg Dialog
Register
Try Features
Freeware Reg Page
Prepay Dialog
Pay Now
Payment Page
Update Page
Show Versions
Lost Code
Lost Code Page
Mode Entry
Enter Code
Code OK
Try Features
Registered Ad User
Registered Free User
Paid User
Old User

Fig. 6A



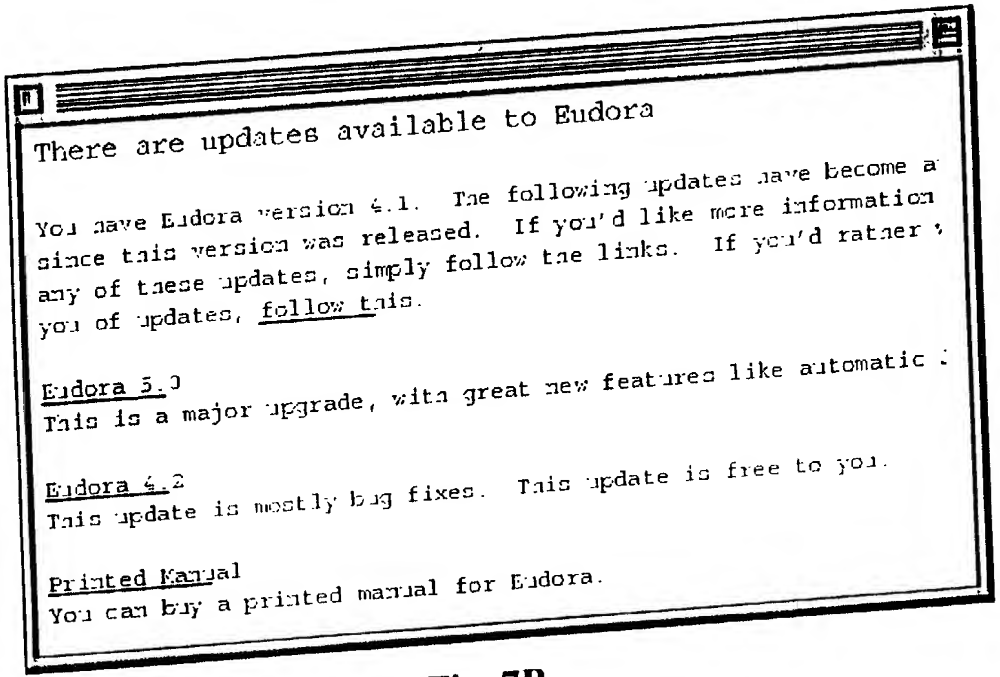
Would you like to try the full-featured version of Eudora?

While Eudora in light mode remains a very capable email program, it lacks all the power of the full version. Here are some of the capabilities you could be using to manage your email (and you'll be getting more of it, we're sure). The full version is free because it is sponsor-supported. That means it has ads in it, but they are displayed in a way that's sensitive to what you're doing when you're in email.

Check the spelling of your email messages as you type
Multiple personalities for managing multiple mail accounts or identities
Message stationery to help you respond to your mail more quickly
Multiple signatures to help personalize your mail
More powerful filtering
Change the personality associated with messages for better organization
Play various sounds when mail arrives depending on your filters
Open a message or mailbox in response to a filter
Print mail directly from filters

These features will be turned on automatically, at no charge, when you click on that enticing button below. (C'mon, take a chance.)

Fig. 6B



There are updates available to Eudora

You have Eudora version 4.1. The following updates have become a
since this version was released. If you'd like more information
any of these updates, simply follow the links. If you'd rather
you of updates, follow this.

Eudora 5.0
This is a major upgrade, with great new features like automatic

Eudora 4.2
This update is mostly bug fixes. This update is free to you.

Printed Manual
You can buy a printed manual for Eudora.

Fig. 7B

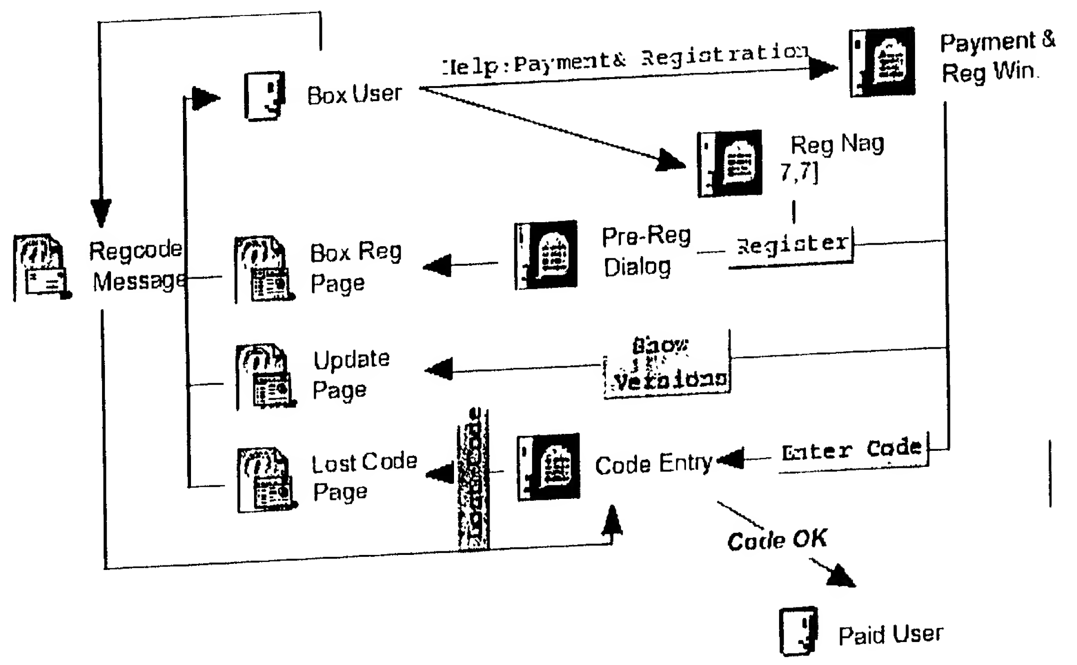

Regcode Message
Box User
Help:Payment& Registration
Payment & Reg Win.
Reg Nag 7,7]
Register
Box Reg Page
Pre-Reg Dialog
Update Page
Show Versions
Lost Code Page
Lost Code
Code Entry
Enter Code
Code OK
Paid User

Fig. 8

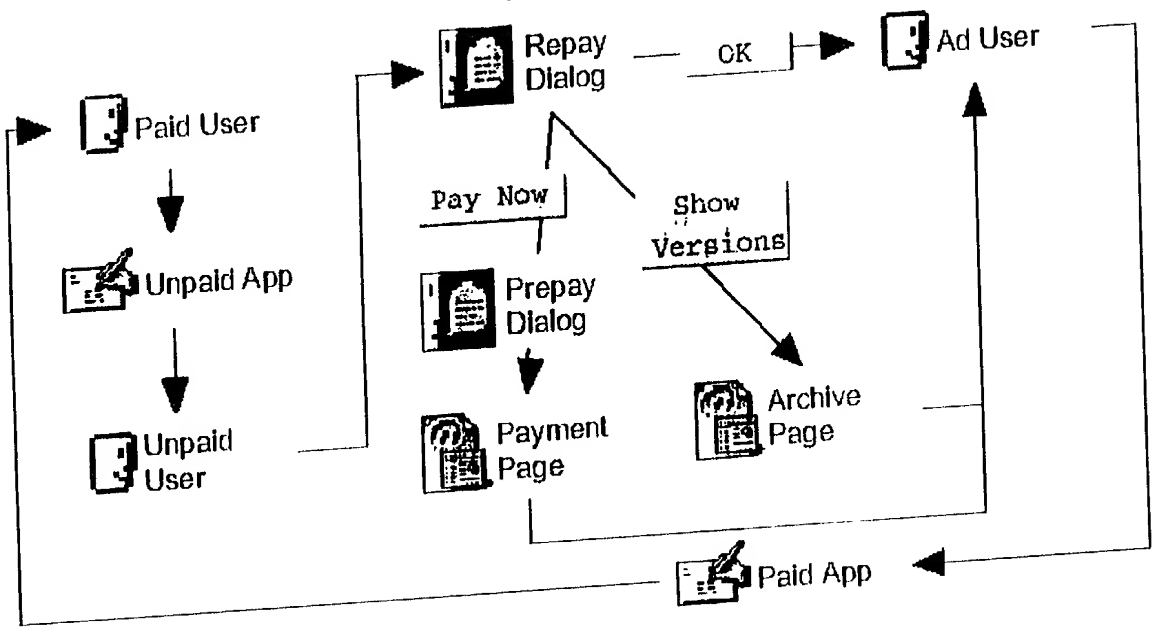
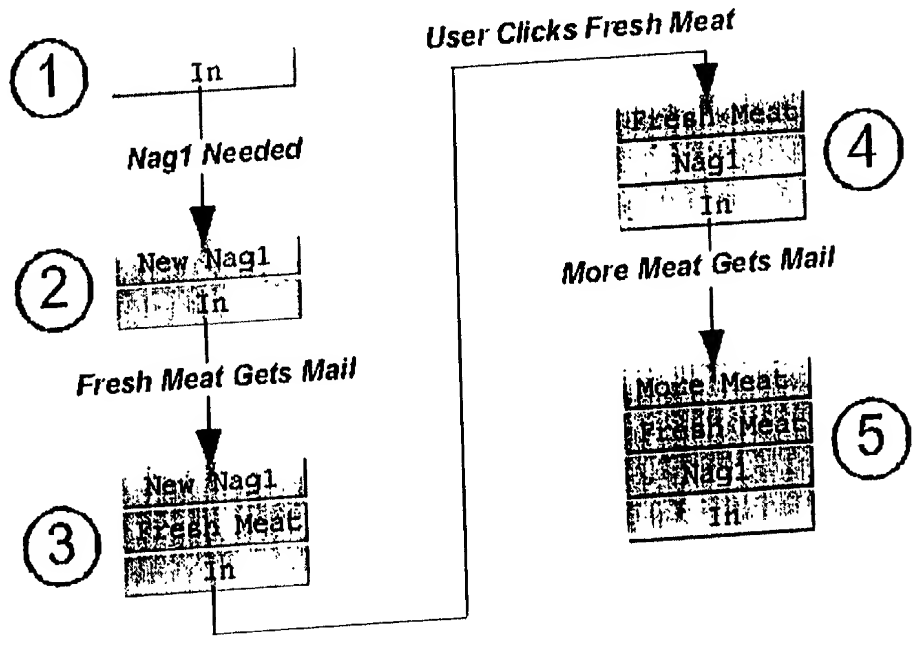
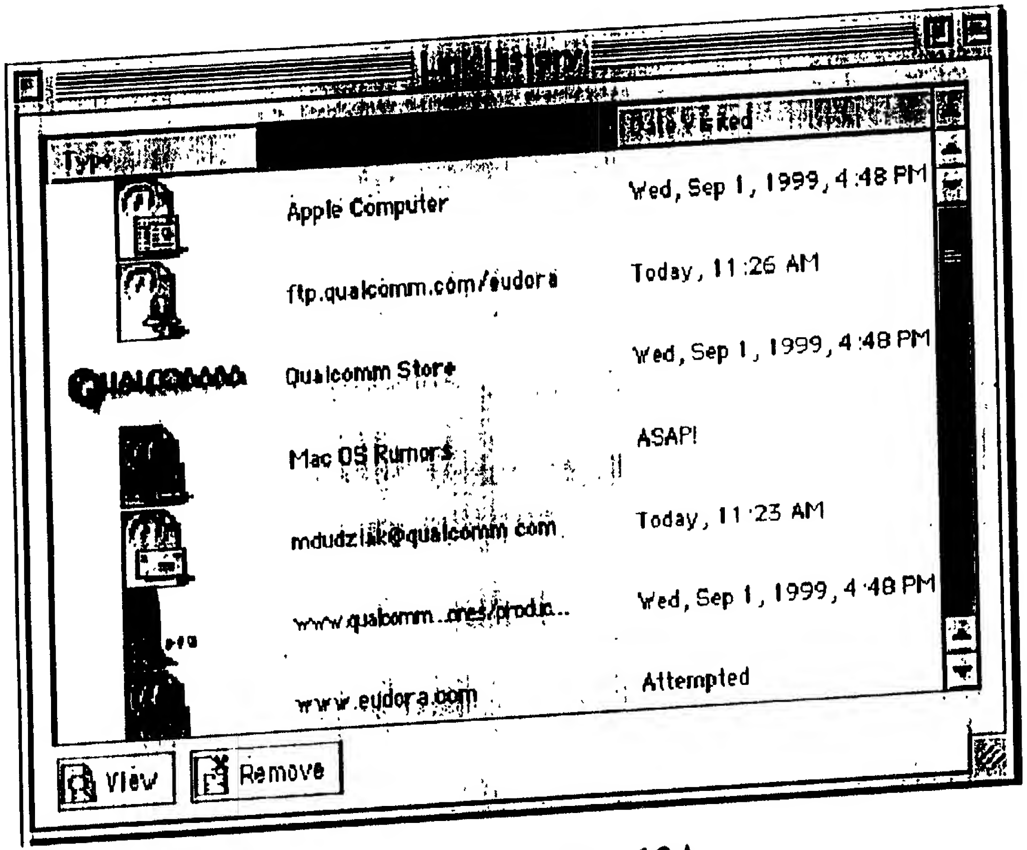

Paid User
Unpaid App
Unpaid User
Repay Dialog
OK
Ad User
Pay Now
Show Versions
Prepay Dialog
Payment Page
Archive Page
Paid App

Fig. 9



1
In
Nag1 Needed
2
New Nag1
In
Fresh Meat Gets Mail
3
New Nag1
Fresh Meat
In
User Clicks Fresh Meat
4
Fresh Meat
Nag1
In
More Meat Gets Mail
5
More Meat
Fresh Meat
Nag1
In

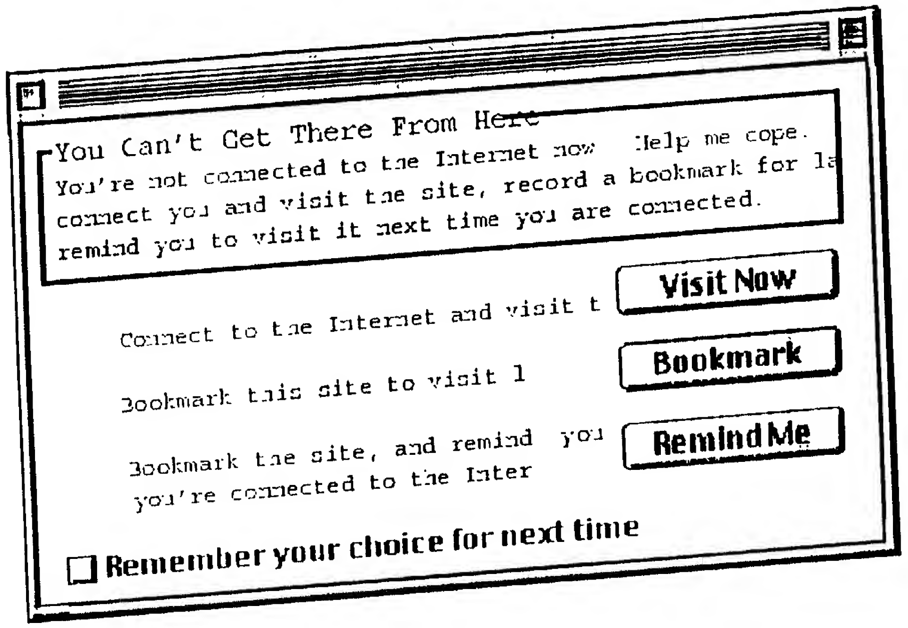
Fig. 10



Link History

Type		Date Visited
	Apple Computer	Wed, Sep 1, 1999, 4:48 PM
	ftp.qualcomm.com/eudora	Today, 11:26 AM
	Qualcomm Store	Wed, Sep 1, 1999, 4:48 PM
	Mac OS Rumors	ASAP!
	mdudziak@qualcomm.com	Today, 11:23 AM
	www.qualcomm...ones/produc...	Wed, Sep 1, 1999, 4:48 PM
	www.eudora.com	Attempted

Fig. 12A



You Can't Get There From Here

You're not connected to the Internet now Help me cope.
You're not connected to the Internet now. Help me cope. You're not connected to the Internet now. Help me cope.

You're not connected to the Internet now Help me cope.
connect you and visit the site, record a bookmark for la
remind you to visit it next time you are connected.

Connect to the Internet and visit t

Visit Now

Bookmark this site to visit l

Bookmark

Bookmark the site, and remind you
you're connected to the Inter

Remind Me

☐ **Remember your choice for next time**

Fig. 12B

00T02T" 55082260

Assumptions	
Average Connect Speed, Kbps	28.8
Average Ad Size, Kbytes	9.3
Number of Users	8,000,000
Number of Hours Running Eudora	2
Number Mailchecks Per User Per Hour	2
Playlist Entry Size, Bytes	500

Fig. 13A

Implications							
			8% Users			8% Users	Playlist
# of New Ads Per User Per Day	# Seconds Per Downloading Ads	# Seconds Added Per Check	Ad Bandwidth, Mbps	Ad Mbps / 100,000 users	Avg Sim Connections, 1000's	Playlist Bandwidth, Mbps	Mbps / 100,000 users
10	26	6	[illegible]	0.8	2.4	[illegible]	[illegible]
15	39	10	101	1.3	3.6	5	0.1
20	52	13	135	1.7	4.8	7	0.1
25	65	[illegible]	[illegible]	[illegible]	6.0	9	0.1
30	78	19	202	2.5	7.2	11	0.1
35	90	23	235	2.9	8.4	12	0.2

Fig. 13B

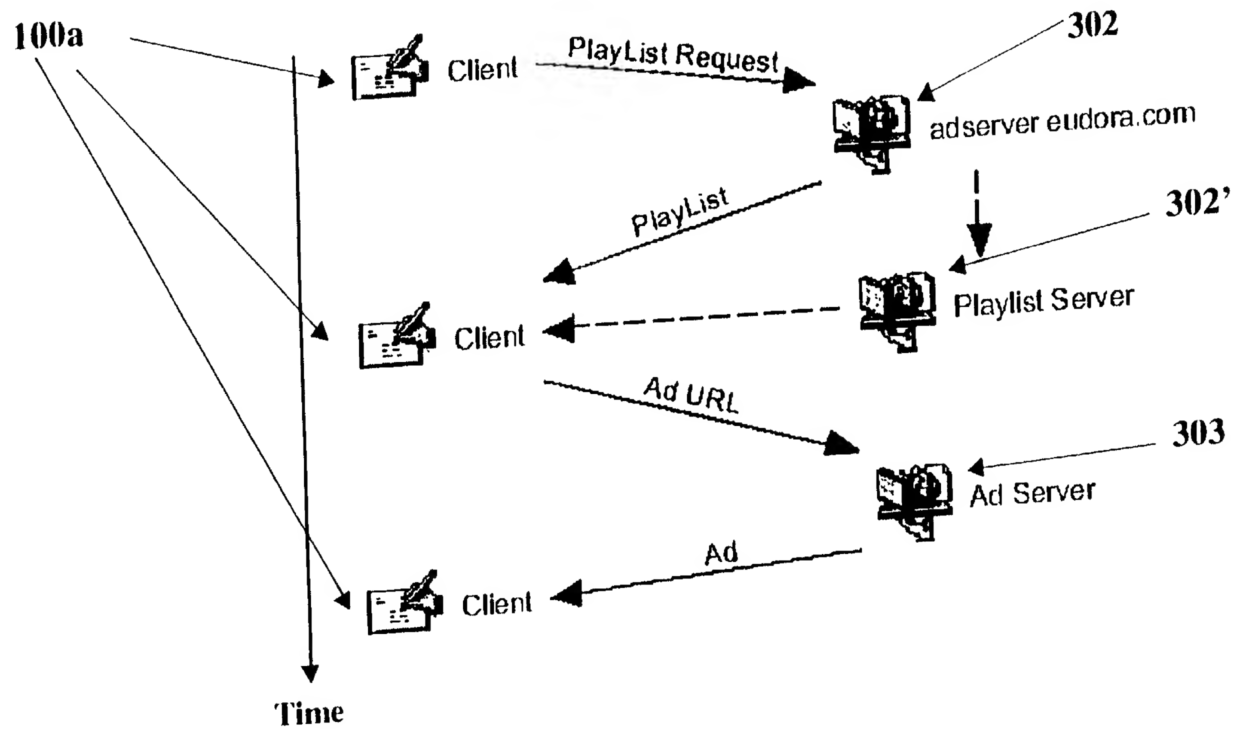

100a
Client
PlayList Request
302
adserver eudora.com
PlayList
302'
Playlist Server
Client
Ad URL
303
Ad Server
Ad
Client
Time

Fig. 14

```
////////////////////////////////////////
// Main ad scheduler
ScheduleMain
{
// Has a new day dawned?
Do CheckForNewDay
// Are we are within the current ad's showFor?
if ( ad.thisShowTime < ad.showFor )
{
// there is nothing to be done
return
}
// At this point, we know that we need a new ad
// Perform housekeeping tasks on the old one
Do AdEndBookkeeping
// Pop out of a block if all ads on par
if ( block isn't all playlists )
{
find ad with minimum ad.numberShown
if ( ad.numberShown >= blockGoal )
set block to all playlists
}
// If we are over our quota of regular ads for the day,
// look for a runout
if ( adFaceTimeToday > faceTimeQuota )
{
Do ShowARunout
}
else
{
Do ShowARegularAd
}
}
// end ad schedule main
```

Fig. 15A

```
////////////////////////////////////////
// We must perform certain tasks when the calendar day
changes.
CheckForNewDay
{if ( the calendar day has changed )
{
// Perform housekeeping tasks on the ad currently showing
Do StopShowingCurrentAd
// Runout ads are charged for a full showFor if they've been
shown
// at all on a given day. Charge any runout ads if they've
been
// shown at all.
for runout ads
{
if ( ad.thisShowTime > 0 )
{
ad.totalTimeShown += ad.showFor
ad.thisShowTime = 0
}
}
// Now, reset the counters for all ads to reflect the fact
that
// a new day has dawned.
for all ads
{
ad.numberShownToday = 0
}
// Record yesterday's facetime
// Might not literally be yesterday, be sure to use
// whatever day the app was last run on
set old current day's facetime to totalFaceTimeToday
// and reset our global regular ad facetime counter
adFaceTimeToday = 0
totalFaceTimeToday = 0
// if we were in a block, back out
set block to all playlists
}
}
// end CheckForNewDay
```

Fig. 15B

```
////////////////////////////////////////
// This function shows a runout ad, and if it
// can't find one, goes to a rerun
ShowARunout
{
for runout ads
{
// has the ad been flushed?
if ( ad.flushed )
try next ad
// are we done showing this runout today?
if ( ad.numberShownToday > ad.dayMax )
try next ad // this one's used up for the day
// are we done showing this runout for ever and ever?
if ( ad.shownFor > ad.showForMax )
try next runout ad // this one's used up forever
// are we between the ad's start and end dates?
if ( ad.startDate < the current date < ad.endDate )
try next runout ad
// the ad is not supposed to run today
// do we actually HAVE the ad?
if ( ad has not been downloaded )
{
ask for ad to be downloaded
try next ad
}
// ok, we believe we should show this runout
// we are now in runout state
Do ShowAnAd
return
}
// if we haven't found a runout ad, we will go to "rerun"
state
Do ShowARerun
}
// end ShowARunout
```

Fig. 15C

```
////////////////////////////////////////
// Rerun state. Look for a regular ad to rerun
ShowARerun
{
for regular ads [ in current block ]
{
// has the ad been flushed?
if ( ad.flushed )
try next ad
// is this ad recent enough to rerun?
if ( ad.lastShownDate is older than returnInterval )
try next ad
// this one is too old to rerun
// if in block, show ads only if it's their "turn"
if ( ad.numberShownToday >= blockGoal )
try next ad // need to find a friend in this block
// are we between the ad's start and end dates?
if ( ad.startDate < the current date < ad.endDate )
try next ad
// the ad is not supposed to run today
// do we actually HAVE the ad?
if ( ad has not been downloaded )
{
ask for ad to be downloaded
try next ad
}
// ok, at this point we can show this ad, but because
// we're in rerun, we don't keep the books
Do ShowAnAd
return
}
// if we get here, we have no ads to show. Punt.
return
}
// end ShowARerun
```

Fig. 15D

```
////////////////////////////////////////
// Show a regular ad
ShowARegularAd
{
for regular ads [ in current block ]
{
// has the ad been flushed?
if ( ad.flushed )
try next ad
// are we done showing this ad today?
if ( ad.numberShownToday > ad.dayMax )
try next ad // this one's used up for the day
// if in block, show ads only if it's their "turn"
if ( ad.numberShownToday >= blockGoal )
try next ad // need to find a friend in this block
// are we done showing this ad for ever and ever?
if ( ad.shownFor > ad.showForMax )
try next ad // this one's used up forever
// are we between the ad's start and end dates?
if ( ad.startDate < the current date < ad.endDate )
try next ad
// the ad is not supposed to run today
// do we actually HAVE the ad?
if ( ad has not been downloaded )
{
ask for ad to be downloaded
try next ad
}
// ok, we believe we should show this ad
// we are now in regular state
Do ShowAnAd
return
}
// If we get here, we have failed to find a regular
// ad. Go to runout
Do ShowARunout
}
// end ShowARegularAd
```

Fig. 15E

```
/////////////////////////////////////////
// Perform necessary housekeeping when we're taking
// down an ad
AdEndBookkeeping
{
// In rerun state, we don't do any bookkeeping
if ( in RerunState )
return
// Account for at most ad.showFor seconds, provided
// we've shown the ad for at least ad.showFor seconds
// Note that this means we don't charge for time beyond
// ad.showFor seconds, which is important
if ( ad.thisShowTime >= ad.showFor )
{
ad.numberShownToday += ad.showFor
ad.shownFor++
// we do NOT reset thisShowTime here, we do it in
// AdStartBookkeeping. It actually doesn't matter where
// we do it, provided we are careful NOT to do it for
// runout ads.
}
}
// end AdEndBookkeeping
```

Fig. 15F

```
////////////////////////////////////////
// Show an ad, including bookkeeping and block handling
ShowAnAd
{
// If the ad is in a block, notice that
if ( it's in a "block" playlist )
{
if ( not currently in a block )
{
find ad in block with minimum numberShown
make that our ad
set blockGoal to minimum numberShown+1
}
set current block to this playlist
}
// now do bookkeeping
Do AdStartBookkeeping
// and actually show it
Do DisplayThatAd
}
```

Fig. 15G

```
////////////////////////////////////////
// Perform housekeeping when we put up an ad
AdStartBookkeeping
{
// In rerun state, we don't do any bookkeeping
if ( in RerunState )
return
// For regular ads
if ( it's a regular ad )
{
ad.thisShowTime = 0
ad.lastShownDate = now
}
}
// end AdStartBookkeeping
```

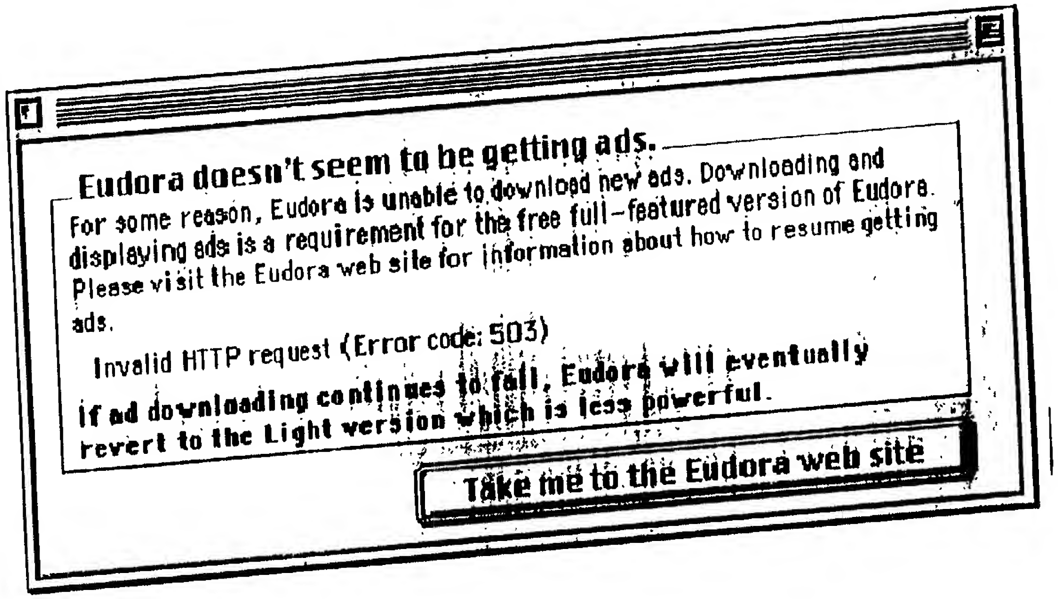
Fig. 15H

Persistent Ads		
PlayList Request	faceTime	Used to determine how much advertising to send to client
	faceTimeLeft	Not used
PlayList Response ClientInfo	reqInterval	Relatively large' one or more days
	flush	Used. Single playlist completely specifies list of ads client should have
PlayList Response Scheduling Parameters	showForMax	Not used

Fig. 16A

Short-Lived Ads		
PlayList Request	faceTime	Not used
	faceTimeLeft	Used to determine how many ads client should receive
PlayList Response ClientInfo	reqInterval	Not used Instead client requests new playlist whenever ads "run low"
	flush'	Not used
PlayList Response Scheduling Parameters	showForMax'	Used to determine how long an ad runs

Fig. 16B



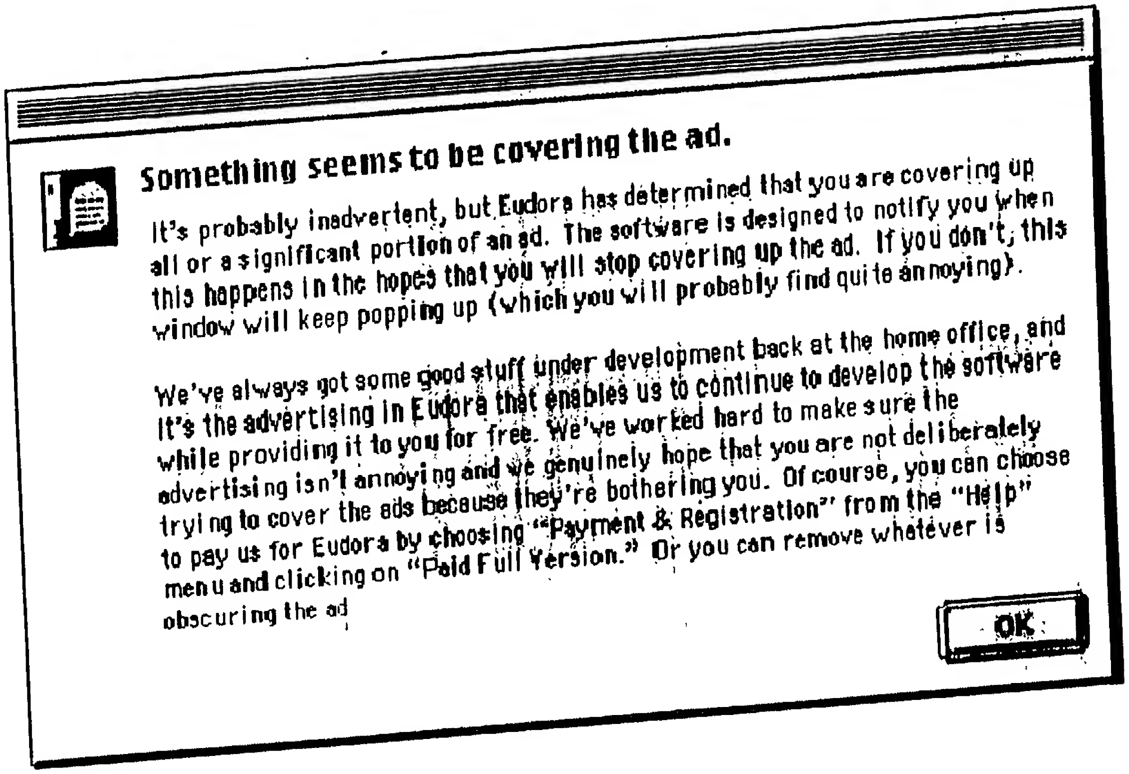
Eudora doesn't seem to be getting ads.

For some reason, Eudora is unable to download new ads. Downloading and displaying ads is a requirement for the free full-featured version of Eudora. Please visit the Eudora web site for information about how to resume getting ads.

Invalid HTTP request (Error code: 503)

If ad downloading continues to fail, Eudora will eventually revert to the Light version which is less powerful.

Fig. 17A

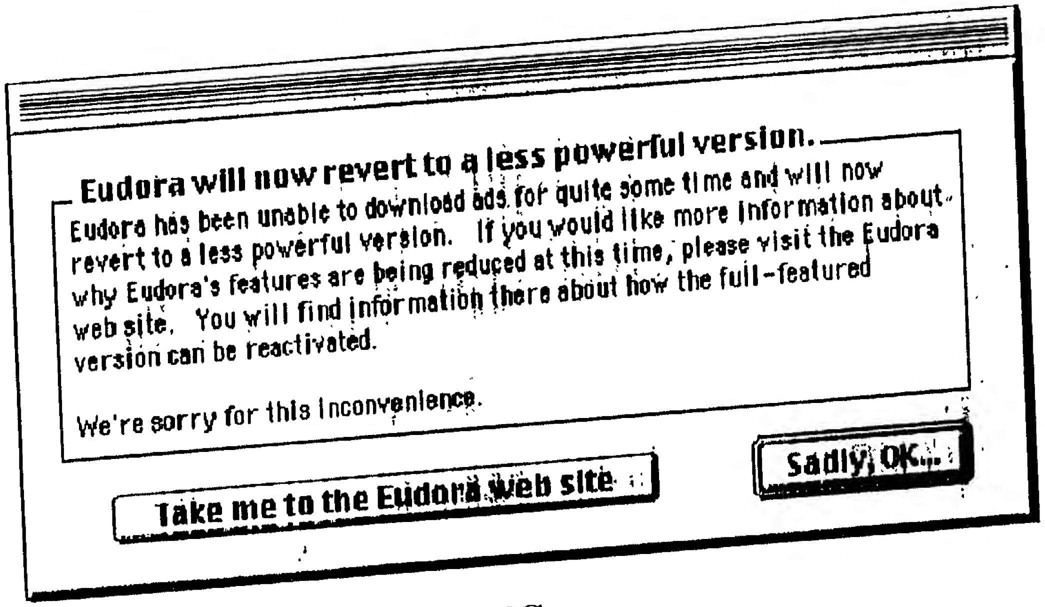


Something seems to be covering the ad.

It's probably inadvertent, but Eudora has determined that you are covering up
all or a significant portion of an ad. The software is designed to notify you when
this happens in the hopes that you will stop covering up the ad. If you don't, this
window will keep popping up (which you will probably find quite annoying).

We've always got some good stuff under development back at the home office, and
It's the advertising in Eudora that enables us to continue to develop the software
while providing it to you for free. We've worked hard to make sure the
advertising isn't annoying and we genuinely hope that you are not deliberately
trying to cover the ads because they're bothering you. Of course, you can choose
to pay us for Eudora by choosing "Payment & Registration" from the "Help"
menu and clicking on "Paid Full Version." Or you can remove whatever is
obscuring the ad

Fig. 17B

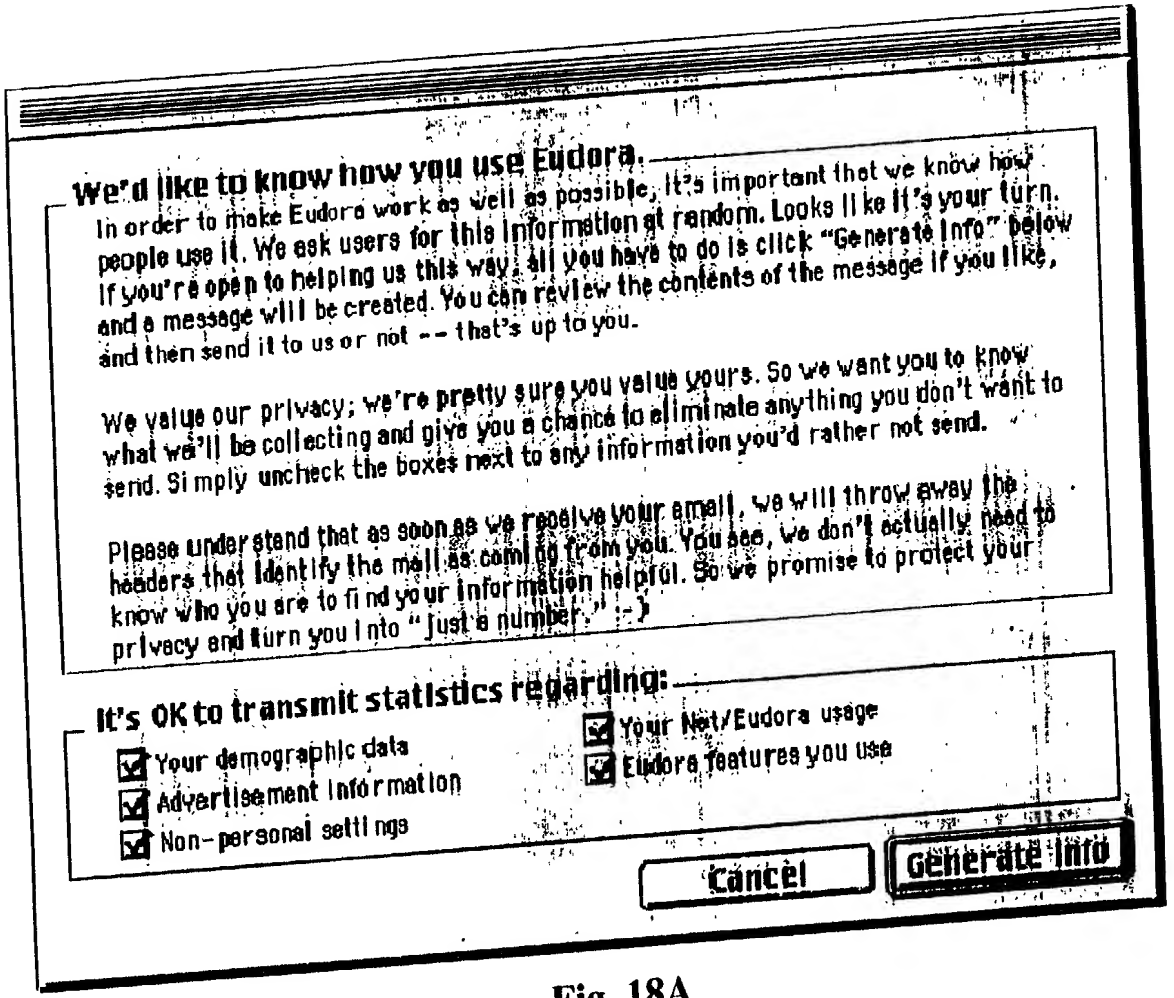


Eudora will now revert to a less powerful version.

Eudora has been unable to download ads for quite some time and will now revert to a less powerful version. If you would like more information about why Eudora's features are being reduced at this time, please visit the Eudora web site. You will find information there about how the full-featured version can be reactivated.

We're sorry for this inconvenience.

Fig. 17C



We'd like to know how you use Eudora.

In order to make Eudora work as well as possible, it's important that we know how people use it. We ask users for this information at random. Looks like it's your turn. If you're open to helping us this way, all you have to do is click "Generate Info" below and a message will be created. You can review the contents of the message if you like, and then send it to us or not -- that's up to you.

We value our privacy; we're pretty sure you value yours. So we want you to know what we'll be collecting and give you a chance to eliminate anything you don't want to send. Simply uncheck the boxes next to any information you'd rather not send.

Please understand that as soon as we receive your email, we will throw away the headers that identify the mail as coming from you. You see, we don't actually need to know who you are to find your information helpful. So we promise to protect your privacy and turn you into "just a number." :-)

It's OK to transmit statistics regarding:

- ☑ Your demographic data
- ☑ Advertisement information
- ☑ Non-personal settings
- ☑ Your Net/Eudora usage
- ☑ Eudora features you use

Fig. 18A

Page	Applicable Query Parts															
	action	platform	product	version	distributorII	mode	realname	email	regfirst	reglast	regcode	oldReg	regLevel	profile	url	adid	topic
Payment	pay	X	X	X	X	X	X	X	X	X	X	X					
Freeware Registratio	register-free	X	X	X	X	X	X	X	X	X	X						
Adware Registration	register-ad	X	X	X	X	X	X	X	X	X	X						
Box Registrations	register-box	X	X	X	X	X	X	X	X	X	X						
Lost Code	lostcode	X	X	X	X	X	X	X	X	X	X	X					
Update	update	X	X	X	X	X							X				
Pro Update	proupdate	X	X	X	X	X							X				
Archived	archived	X	X	X	X	X											
Profile	profile	X	X	X	X	X	X	X						X			
Introduction	intro																
Support	n/a	X	X	X	X	X	X	X	X	X	X	X					
QuickTime Missing	support	X	X	X	X												no-qt
Ad Failure	support	X	X	X	X												ad-fail
Tutorial	support	X	X	X	X												tutor
FAQ	support	X	X	X	X												faq
Light Users	support	X	X	X	X												light
Search Support	support	X	X	X	X												search
Newsgroups	support	X	X	X	X												usenet

Fig. 19

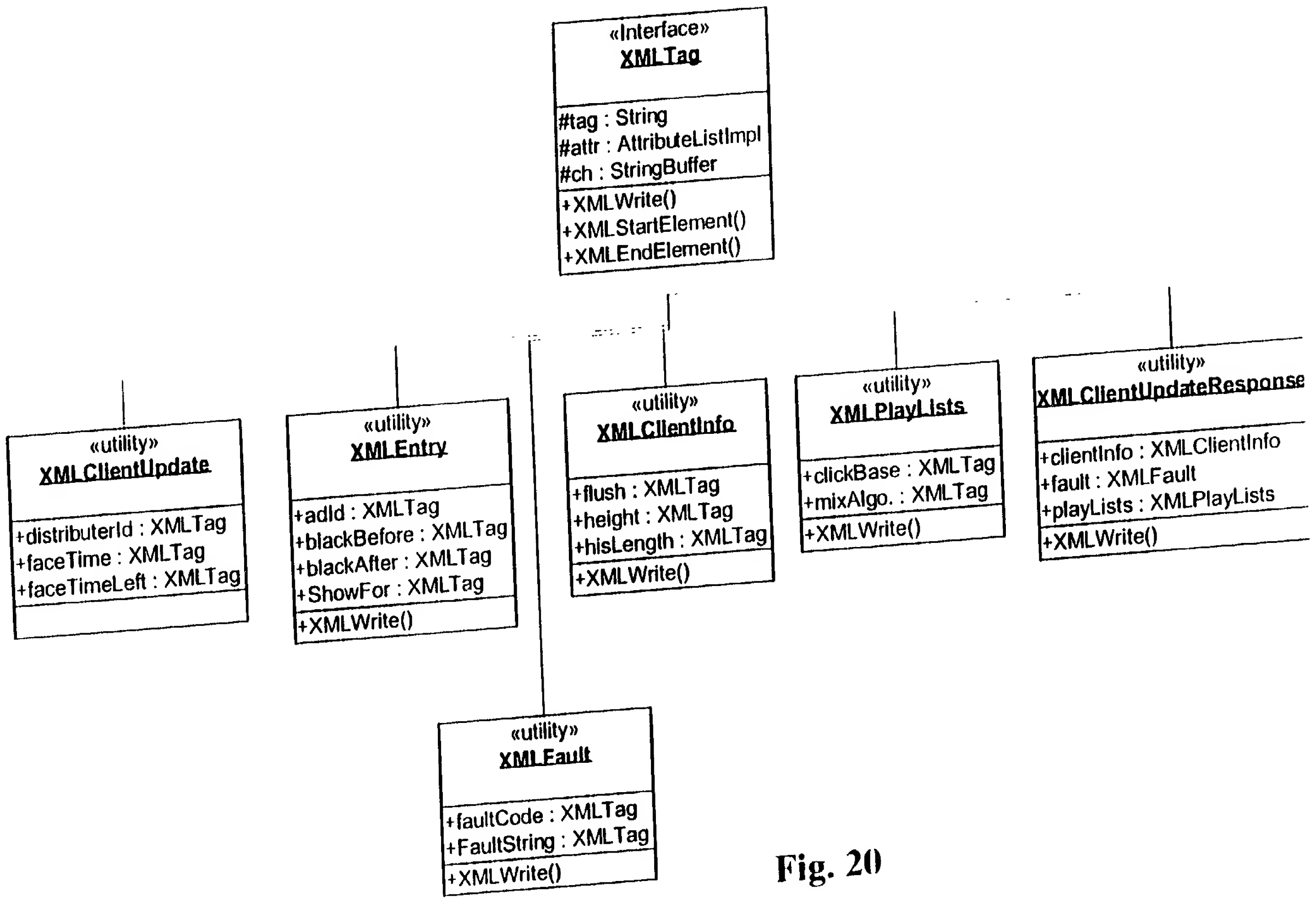

«Interface»
XMLTag
#tag : String
#attr : AttributeListImpl
#ch : StringBuffer
+XMLWrite()
+XMLStartElement()
+XMLEndElement()
«utility»
XMLClientUpdate
+distributerId : XMLTag
+faceTime : XMLTag
+faceTimeLeft : XMLTag
«utility»
XMLEntry
+adId : XMLTag
+blackBefore : XMLTag
+blackAfter : XMLTag
+ShowFor : XMLTag
+XMLWrite()
«utility»
XMLClientInfo
+flush : XMLTag
+height : XMLTag
+hisLength : XMLTag
+XMLWrite()
«utility»
XMLPlayLists
+clickBase : XMLTag
+mixAlgo. : XMLTag
+XMLWrite()
«utility»
XMLClientUpdateResponse
+clientInfo : XMLClientInfo
+fault : XMLFault
+playLists : XMLPlayLists
+XMLWrite()
«utility»
XMLFault
+faultCode : XMLTag
+FaultString : XMLTag
+XMLWrite()

Fig. 20

❖ The list of available ads advantageously can be built from the following query:

```
ads = dbCon.prepareStatement("SELECT * FROM ads WHERE StartDate <= today AND endDate >= today + 30 AND
AdType = "I" AND AdStatus = "A" AND ImpressionsServed < Impressions ORDERD BY ImpressionsServed ASC);

run out ads = dbCon.prepareStatement("SELECT * FROM ads WHERE StartDate <= today AND endDate >= today +
30 AND AdType = "R" AND AdStatus = "A" AND ImpressionsServed < Impressions ORDERD BY ImpressionsServed
ASC);
```

❖ The time required to deliver the ads advantageously can be calculated in the following manner.

```
face time left for today [seconds] = faceTime[today] – faceTimeUsedToday

        (Comment: Face time left for today is the number of secondes the servlet can use to deliver special ads today.)

predict face time [seconds] = SUM( faceTime[tomorrow] , faceTime[tomorrow + 1] , ... faceTime[tomorrow + reqInterval]
)

        (Comment: Predict face time is the number of seconds the servlet predicts the user is going to have.)

goal show time left [seconds] = predict face time – faceTimeLeft

        (Comment: Goal show time left is the number of seconds that the software provider needs to fill with ads.)
```

Fig. 21A

```
8  Targeting
       while (face time left for today ) {
              if ad is not in the history {
                     select ad [according to target = today]
                     face time left for today -= ad.showFor
              }
              next ad
}

while (Goal show time left ) {
       if ad is not in the history {
              select ad [according to target]
              goal show time left -= ad.showFor
       }
       next ad
}


Default values:
       reqInterval = 1 day.
       facetime = 30 minutes
       faceTimeQuota is ?
       histLength = 31 days
```

Fig. 21B

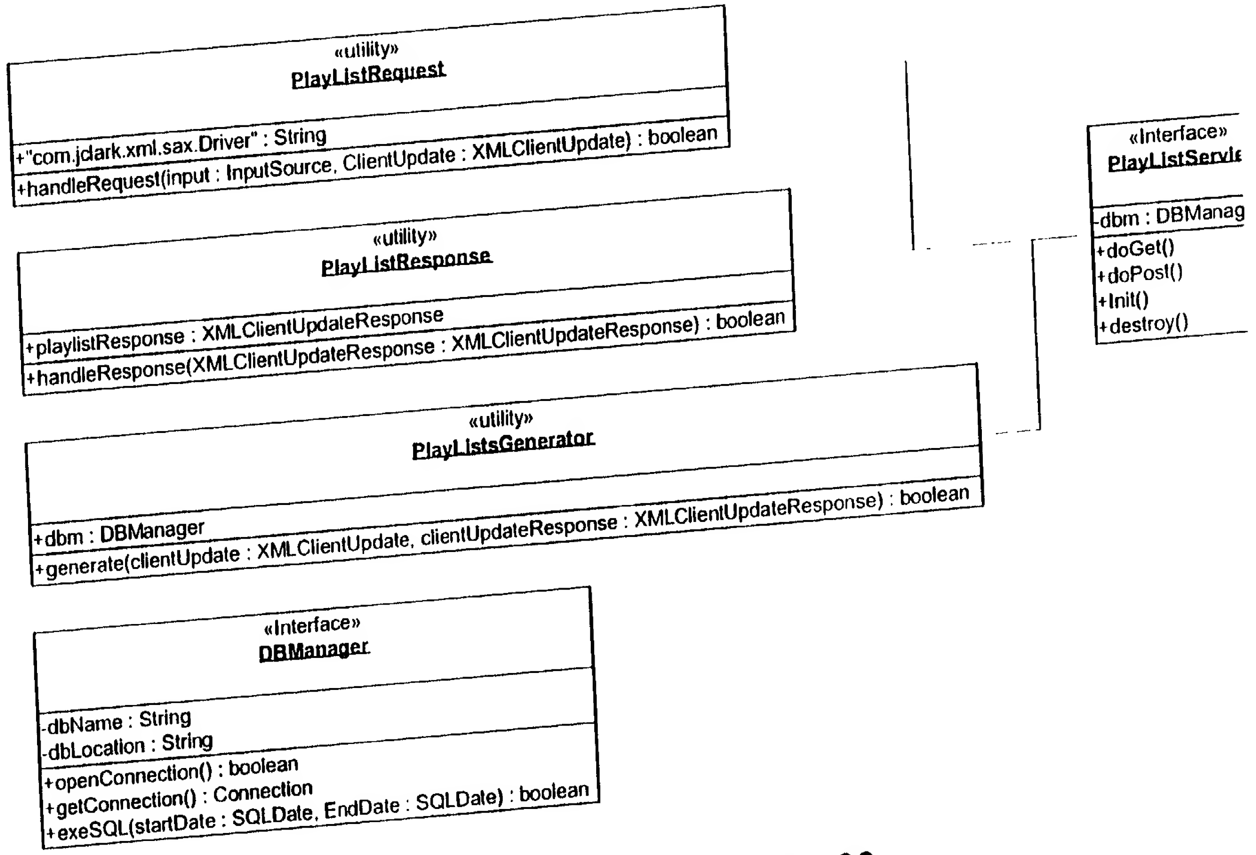

«utility»
PlayListRequest
+"com.jdark.xml.sax.Driver" : String
+handleRequest(input : InputSource, ClientUpdate : XMLClientUpdate) : boolean
«utility»
PlayListResponse
+playlistResponse : XMLClientUpdateResponse
+handleResponse(XMLClientUpdateResponse : XMLClientUpdateResponse) : boolean
«utility»
PlayListsGenerator
+dbm : DBManager
+generate(clientUpdate : XMLClientUpdate, clientUpdateResponse : XMLClientUpdateResponse) : boolean
«Interface»
DBManager
-dbName : String
-dbLocation : String
+openConnection() : boolean
+getConnection() : Connection
+exeSQL(startDate : SQLDate, EndDate : SQLDate) : boolean
«Interface»
PlayListServl
-dbm : DBManag
+doGet()
+doPost()
+Init()
+destroy()

Fig. 22

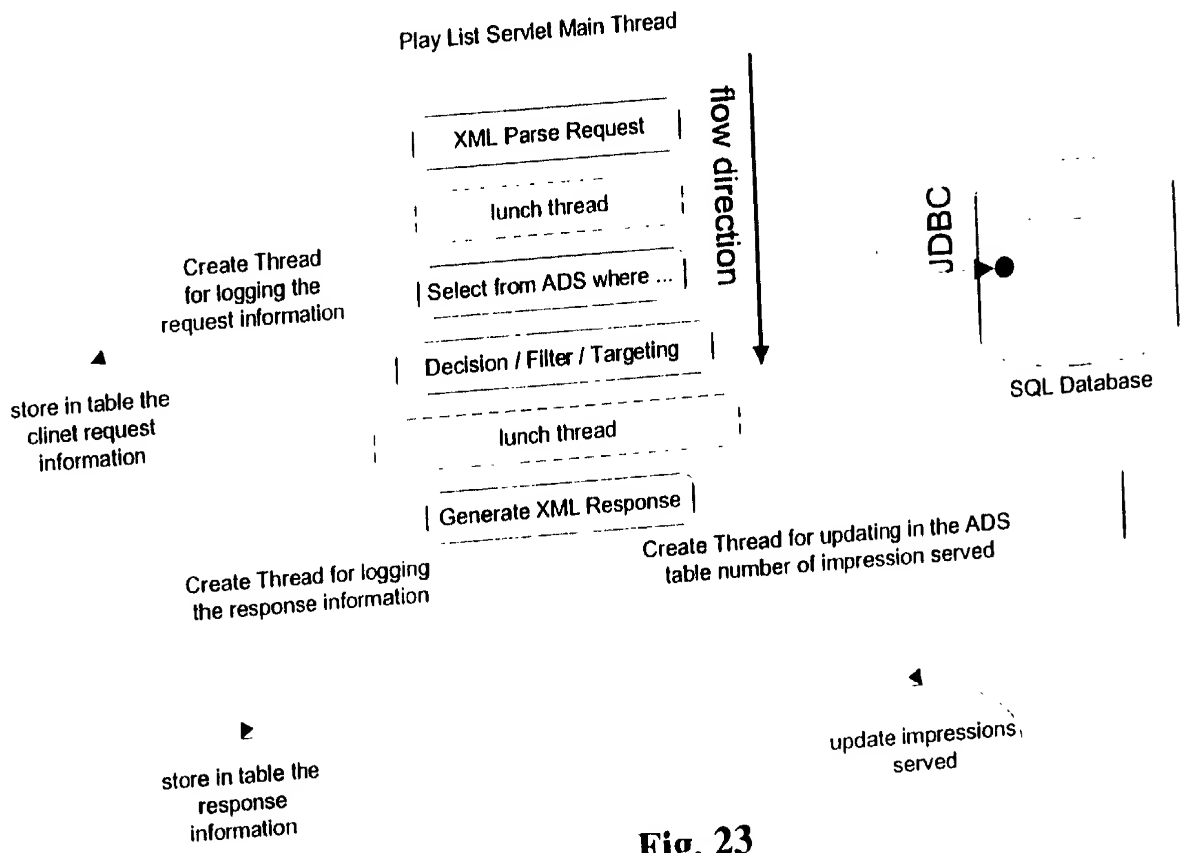

Play List Servlet Main Thread
XML Parse Request
lunch thread
Select from ADS where ...
Decision / Filter / Targeting
lunch thread
Generate XML Response
flow direction
JDBC
SQL Database
Create Thread for logging the request information
store in table the clinet request information
Create Thread for logging the response information
store in table the response information
Create Thread for updating in the ADS table number of impression served
update impressions served

Fig. 23